animal, and hence called cervical ribs. These ribs are about twenty-five in number, and gradually lengthen from the upper end to the tenth or eleventh pair, and then successively shorten to the last. They extend in lateral directions, having only a slight curvature; and when depressed, lie upon the side of the spine, one on the other. They are raised by four sets of muscles; and another large set of very long muscles has the power of bringing the skin forward, thus forming the appearance which has been called a hood. Besides these muscles, there are three other sets, by which the hood is depressed, and the parts are restored to that state in which the neck of the animal does not appear disproportionally protuberant. These descriptions are illustrated by accurate drawings; but no conjecture is here given as to the probable uses of this singular mechanism, except that it does not appear to promote in any way the play of the lungs, but that the expansion it produces may perhaps facilitate a dilatation of the gullet, for the purpose of allowing the snake to swallow its prey more easily.

Continuation of an Account of the Changes that have happened in the relative Situation of double Stars. *By* William Herschel, *LL.D. F.R.S.* Read June 7, 1804. [*Phil. Trans.* 1804, *p.* 353.]

In the former part of this paper, Dr. Herschel mentioned the changes he had noticed in the situation of six double stars; and in investigating the causes of those changes, he declared that he had recourse to the most authentic observations he could find of their motions in right ascensions and polar distance, especially in the instance of the double star Castor: but finding in the tables which have been lately published in the last volume of the Greenwich Observations, which give the proper motions of thirty-six stars, that (especially in the instance of the above-named star,) the motions are somewhat different from those he assigned to them in his former communication, he now undertakes to review the arguments he there used, in order to ascertain what will be the result of these new motions. As this investigation, which forms the first part of the present paper, has a continual reference to the contents of the preceding one, it will be in vain to attempt an abridgement, which could not be rendered intelligible within our usual limits. Nor can we enter here into a detail of the sequel of Dr. Herschel's observations on the changes in the situation of a great number of additional double stars; this second part of the paper, in which they are fully detailed, being itself a minute of his proceedings, in which he is at particular pains to point out that these changes of situation are not the effect of parallax.